REMARKS

Claims 14-21 and 23-26 are pending in this application. No claims have been amended by this Response. No new matter has been added.

Claims 15-18, 20, 22 and 26 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0068485 to Ramsey in view U.S. Patent No. 5,453,454 to Alicke et al.

As appreciated by the Examiner, Ramsey fails to suggest a melt comprising talc as a nucleating agent, as recited in claim 18. However, the Office Action relies on Alicke for curing the deficiencies of Ramsey.

The Office Action asserts that the unexpected results of the claimed subject matter, i.e., obtaining foam sheets having a density comparable to sheets not containing fillers but with a substantially higher compressive strength, are not persuasive because the comparison of filled versus unfilled foams is not pertinent to the combination of Alicke with Ramsey.

Applicants respectfully disagree with the assertion in the Office Action. Specifically, it is duly noted that the presence of a property not possessed by the applied art is evidence of nonobviousness. In this context, Applicants note that neither applied citation suggests the combination of all of the features of claim 18. As such, the assertion in the Office Action at page 7, lines 7-10, that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art, is unfounded.

In particular, *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985), the Board decision on which the Office Action relies, involved a situation in which Obiaya argued that a labyrinth heater has a shorter response time, which was an unexpected result. The Board, however, held that it was know in the art that labyrinth heaters maintain a uniform temperature. As such, Ex parte Obiaya merely discusses properties, unexpected or not, of labyrinth heaters

regardless of where they are employed. By stark contrast, the Office Action relies on the teaching of including talc at 0.51% by weight set forth in Alicke in combination with the process suggested in Ramsey. Unlike labyrinth heaters, which are mechanical apparatuses, chemical processes may not simply be dissected into individual pieces and reassembled into a hypothetical process with the expectation that the individual pieces will provide the same benefits to the hypothetical process as to the related art process. Rather, a skilled artisan in an unpredictable art such as the chemical arts, is accustomed to the fact that reaction conditions, such as temperature, concentration, and reactants, may not simply be interchanged between different processes.

As such, given the myriad of possible combinations of the individual pieces, the discovery of unexpected results, as is the case here, should be given patentable weight rather than being mischaracterized as another advantage of a process, which, prior to this application, has never been described.

Moreover, Ramsey suggests extruded or expanded polystyrene foam boards containing 2 to 25 weight percent of acicular particles, such as fiberglass, stone wool, metal wool, gypsum, quartz and wollastonite, which are used to make the foam boards termite resistant. Alicke, on the other hand, teaches neither insect resistant foam boards nor the use of acicular particles. A person having ordinary skill in the art has therefore no motivation to combine Alicke with Ramsey because there is no indication that Alicke would confer any benefits on the termite-resistant foam articles of Ramsey.

Further, even if a person skilled in the art would combine the applied citations in the manner suggested, the Office Action fails to provide a reasoning why the skilled artisan would have chosen the particular cell regulator out of all the possible constituents and additives suggested in Alicke for the specific polymers that are neither preferred nor used in the examples of Ramsey and Alicke. Further, the skilled artisan would have had to select specific halogen-free blowing agents from among all the possible blowing agents, whereas Ramsey suggests various blowing agents including many halogenated blowing agents and many blowing agents, which are readily combustible at high temperatures.

Claim 14 is rejected under 35 U.S.C. §103(a) as being unpatentable over Ramsey in view of Alicke and further in view of U.S. Patent No. 4,987,179 to Duncan.

The Office Action relies on Duncan for suggesting using styrene-acrylonitrile copolymer within a range of 20 to 35% by weight. Linton is not applied in a manner to cure the deficiencies of Ramsey discussed above.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ramsey in view of Alicke and further in view of U.S. Patent No. 5,024,826 to Linton.

The Office Action relies on Linton for suggesting silica filler having an average particle diameter of 0.05 to 15 microns. Linton is not applied in a manner to cure the deficiencies of Ramsey discussed above.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ramsey in view of Alicke and further in view of U.S. Patent No. 5,218,006 to Reedy et al.

The Office Action relies on Reedy for suggesting a mixture of a polymer containing a filler and a polymer not containing a filler. Reedy is not applied in a manner to cure the deficiencies of Ramsey and Alicke discussed above.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ramsey in view of Alicke and in further view of U.S. Patent No. 5,128,073 to Allen et al.

Alicke and Ramsey are directed to styrene polymer foam boards. Even if these applied citations mention other polymers, the preferred embodiments always comprise styrene polymers. Polysulfones, polyetherimides or polyether ketones are a different class of polymers with different physical and chemical properties as well as process conditions for foaming. This can be seen, for example, at the much higher foaming temperatures set forth for examples 1C, 2, 5C and 6 compared with examples 3C and 4 in the Table on page 15 of the specification. Also, as

indicated at page 7, lines 12 to 16, and at the Table on page 15, the blowing agent composition has to be adapted to the specific polymers. The person skilled in the art would not be apprised by Ramsey and Alicke of which blowing agent would be best suited for polysulfones, polyetherimides, or polyether ketones.

Allen is directed to expandable thermoplastic resin beads coated with a very high frequency energy absorbing material (abstract). As noted at col. 9 line 65 to Col 10, line 8, the thermoplastic resin is supplied in particulate form and then impregnated with a blowing agent. In the examples, expandable polystyrene (EPS) or blends of polystyrene with polyphenylenether are used as starting materials The particulate thermoplastic resin impregnated with a blowing agent is then coated with an effective amount of a very high frequency energy absorbing organic material, pre-expanded and processed to foamed articles by fusion of the pre-foamed particles. See col. 10, lines 64 to 68, and col. 12, lines 3 to 14, of Allen.

The process in Allen is far removed from the processes according to Alicke and Ramsey, where a foam web or sheet is directly produced by extruding a melt comprising a foaming agent and foaming the melt. The person skilled would not consider Allen for such an foam board extrusion process.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicants concurrently herewith submit the requisite fee for a Petition for a two-month Extension of Time. Applicants believe no additional fee is due with this response. However, if any such additional fee is due, please charge our Deposit Account No. 22-0185, under Order No. 12810-00339-US1 from which the undersigned is authorized to draw.

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Respectfully submitted,

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